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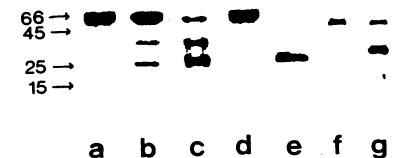
BIOLOGICALLY ACTIVE BACTERICIDAL/PERMEABILITY-INCREASING PROTEIN FRAGMENTS

• . .

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FIG. 1

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FIGS. 2a and 2b

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FIG. 2a

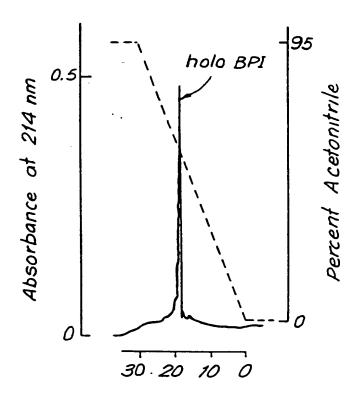
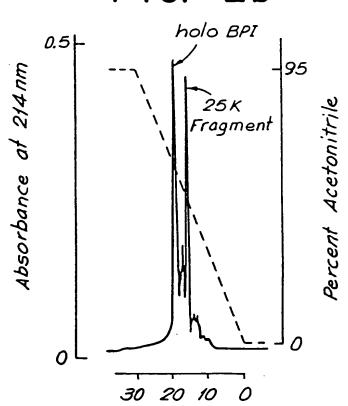


FIG. 2b



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FIGS. 3A, 3B, 3C and 3D

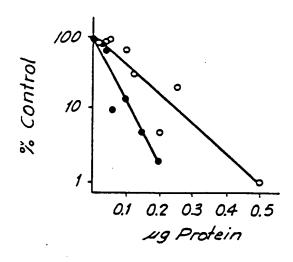
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FIG. 3A

Bosterial Viability

FIG. 3B

14C-Amino Acid Incorp.
(-Actinomycin D)



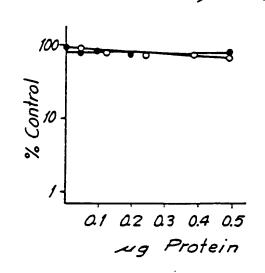


FIG. 3C

14C-Amino Acid Incorp.
(+Actinomycin D)

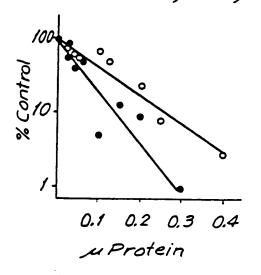
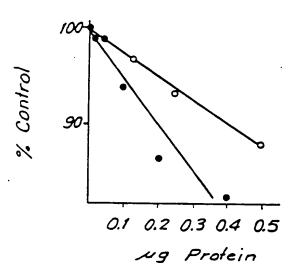


FIG. 3D

Phospholipid Hydrolysis



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FIGS. 4 and 5

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FIG. 4



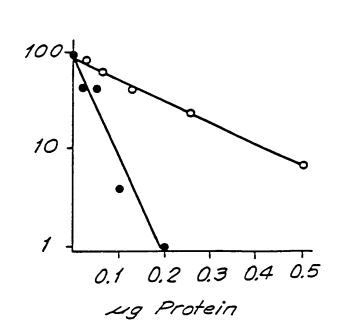
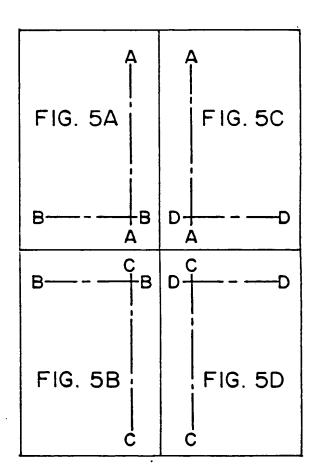


FIG. 5



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INCREASING PROTEIN FRAGMENTS

B -

FIG. 5A

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FIG. 5A

-30met arg glu asn 1 CAGGCCTTGAGGTTTTGGCAGCTCTGGAGG ATG AGA GAG AAC -10leu met val leu val ala ile gly thr ala val thr 82 CTG ATG GTG CTC GTC GCC ATA GGC ACC GCC GTG ACA 20 Lys Gly Leu Asp Tyr Ala Ser Gln Gln Gly Thr Ala 157 AAG GGC CTG GAC TAC GCC AGC CAG CAG GGG ACG GCC Tyr Ser Asp Ser Phe Lys Ile Lys His Leu Gly Lys 232 TAC TCA GAC AGC TTT AAG ATC AAG CAT CTT GGG AAG 70 Gln Leu Pro Ser Ser Gln Ile Ser Met Val Pro Asn 307 CAG CTT CCC AGT TCC CAG ATA AGC ATG GTG CCC AAT 90 Ile Ser Gly Lys Trp Lys Ala Gln Lys Arg Phe Leu 382 ATC AGC GGG AAA TGG AAG GCA CAA AAG AGA TTC TTA 120 Ser Ile Ser Ara Asp Leu Lys Leu Gly Ser Asn Pro 457 TCC ATT TCG GCT GAT CTG AAG CTG GGC AGT AAC CCC 140 Ser His Ile Asn Ser Val His Val His Ile Ser Lys 532 AGC CAC ATC AAC AGT GTC CAC GTG CAC ATC TCA AAG 170 Ile Glu Ser Ala Leu Arg Asn Lys Met Asn Ser Gln 607 ATT GAG TCT GCG CTT CGA AAC AAG ATG AAC AGC CAG 190 Gln Pro Tyr Phe Gln Thr Leu Pro Val Met Thr Lys 682 CAA CCT TAT TTC CAG ACT CTG CCA GTA ATG ACC AAA Pro Pro Ala Thr Thr Ala Glu Thr Leu Asp Val Gln 757 CCT CCA GCA ACC ACG GCT GAG ACC CTG GAT GTA CAG 240 Pro Pro Phe Ala Pro Pro Val Met Glu Phe Pro Ala 832 CCT CCC TTT GCT CCA CCA GTG ATG GAG TTT CCC GCT

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FIG. 5B

B Phe Phe Asn Thr Ala Gly Leu Val Tyr Gln Glu Ala 907 TTC TTC AAC ACA GCC GGG CTT GTA TAC CAA GAG GCT 290 Lys Glu Ser Lys Phe Arg Leu Thr Thr Lys Phe Phe 982 AAG GAG TCC AAA TTT CGA CTG ACA ACC AAG TTC TTT Met Lys Ile Gln Ile His Val Ser Ala Ser Thr Pro 1057 ATG AAG ATA CAG ATC CAT GTC TCA GCC TCC ACC CCG 340 Pro Ala Val Asp Val Gln Ala Phe Ala Val Leu Pro 1132 CCT GCC GTG GAT GTC CAG GCC TTT GCC GTC CTC CCC 370 Thr Thr Gly Ser Met Glu Val Ser Ala Glu Ser Asn 1207 ACA ACT GGT TCC ATG GAG GTC AGC GCC GAG TCC AAC 390 Glu Leu Lys His Ser Asn Ile Gly Pro Phe Pro Val 1282 GAA CTG AAG CAC TCA AAT ATT GGC CCC TTC CCG GTT Leu Val Leu Pro Arg Val Asn Glu Lys Leu Gln Lys 1357 CTT GTG CTG CCC AGG GTT AAC GAG AAA CTA CAG AAA 440 Asn Val Val Leu Gln Pro His Gln Asn Phe Leu Leu 1432 AAC GTA GTG CTT CAG CCT CAC CAG AAC TTC CTG CTG 1511 GGGGCTGTCAGCCGCACCTGTTCCTGATGGGCTGTGGGGCACCGGC 1611 TTCTTCGACTCAGATTCAGAAATGATCTAAACACGAGGAAACATTAT 1711 GCTAAGGCTGCAGAGATATTTCCTCCAGGAATCGTGTTTCAATTGTA 1811 GTG---poly-A tail

В

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FIG. 5C

)												
							-20					
met	ala	arg	gly	pro	cys	asn	ala	pro	arg	trp	val	ser
ATG	GCC	AGG	GGC	CCT	TGC	AAC	GCG	CCG	AGA	TGG	GTG	TCC
		1									10	
ala	ala	_	Asn	Pro	Glv	Val	Val	Val	Arg	Ile	Ser	Gln
GCG	GCC	GTC	AAC	CCT	GGC	GTC	GTG	GTC	AGG	ATC	TCC	CAG
	.	01	•	-	_	30	_		_			
CCT	Leu	CYC	Lys	GIU	Leu	Lys	Arg	Ile	Lys	Ile	Pro CCT	Asp
GC.	CIG	CAG	AAG	GAG	CIG	AAG	AGG	ATC	AAG	ATT	CCT	GAC
	50										60	
Gly	His	Tyr	Ser	Phe	Tyr	Ser	Met	Asp	Ile	Arg	Glu	Phe
GGG	CAT	TAT	AGC	TTC	TAC	AGC	ATG	GAC	ATC	CGT	GAA	TTC
	•					0.0						
Val	Glv	T.e.u	Lve	Dha	C0.2	80	C	3		•		_
GTG	GGC	CTT	AAG	TTC	TCC	ATC	Ser Acc	ASD	ecc ara	ASN	Ile ATC	Lys
								nne	GCC	UUI	AIC	AAG
	100										110	
Lys	Met	Ser	Gly	Asn	Phe	Asp	Leu	Ser	Ile	Glu	Gly	Met
AAA	ATG	AGC	GGC	AAT	TTT	GAC	CTG	AGC	ATA	GAA	GGC	ATG
						130						
Thr	Ser	Glv	Lvs	Pro	Thr		Thr	Cvs	Ser	Sar	Cys	C
ACG	TCA	GGC	AAG	CCC	ACC	ATC	ACC	TGC	TCC	AGC	TGC	AGC
	•											
C	150			_	_						160	
Ser	Lys	Val	Gly	Trp	Leu	Ile	Gln	Leu	Phe	His	Lys	Lys
noc	ппп	GIC	666	166	CTG	ATC	CAA	CTC	TTC	CAC	AAA	AAA
Val	Cva	Glu	T.ve	Val	mh ∽	180	Sar	v.i	Co.=	C - =	Lys	•
GTC	TGC	GAG	AAA	GTG	ACC	AAT	TCT	GTA	TCC	JCC Ser	TAR	CTG
									•••			C10
	200										210	
He	dsy	Ser	Val	Ala	Gly	Ile	Asn	Tyr	Gly	Leu	Val	Ala
ATA	GAT	TCT	GTG	GCT	GGA	ATC	AAC	TAT	GGT	CTG	GTG	GCA
						230						
Met	Lys	Gly	Glu	Phe	Tyr		Glu	Asn	His	His	Asn	Pro
ATG	AAG	GGG	GAG	TTT	TAC	AGT	GAG	AAC	CAC	CAC	AAT	CCA
A) =	250	1.5-	1	Mat	17- 1	.	-		_	_	260	
GCC	CAT	usb usb	vid	TOTA	A T	TYT	ren	GIA	Leu	Ser	Asp GAC	Tyr
					GIV	TUC	CIG	30 C		ICA	GAC	TAC

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FIG. 5D

280 Gly Val Leu Lys Met Thr Leu Arg Asp Asp Met Ile Pro GGG GTC TTG AAG ATG ACC CTT AGA GAT GAC ATG ATT CCA 310 300 Gly Thr Phe Leu Pro Glu Val Ala Lys Lys Phe Pro Asn GGA ACC TTC CTA CCT GAG GTG GCC AAG AAG TTT CCC AAC 330 Pro His Leu Ser Val Gln Pro Thr Gly Leu Thr Phe Tyr CCA CAC CTG TCT GTG CAG CCC ACC GGC CTT ACC TTC TAC 360 Asn Ser Ser Leu Ala Ser Leu Phe Leu Ile Gly Met His AAC TCC TCC CTG GCT TCC CTC TTC CTG ATT GGC ATG CAC 380 Arg Leu Val Gly Glu Leu Lys Leu Asp Arg Leu Leu Leu AGG CTT GTT GGA GAG CTC AAG CTG GAT AGG CTG CTC CTG 400 Glu Leu Leu Gln Asp Ile Met Asn Tyr Ile Val Pro Ile GAA TTG CTG CAG GAT ATC ATG AAC TAC ATT GTA CCC ATT 430 Gly Phe Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr GGC TTC CCT CTC CCG ACG CCC AGA GTC CAG CTC TAC Phe Gly Ala Asp Val Val Tyr Lys TTC GGT GCA GAC GTT GTC TAT AAA TGA AGGCACCAGGGGTGCC TGCCTTTCCCCAGGGAATCCTCCAGATCTTAACCAAGAGCCCCTTGCAAAC TCATTGGAAAAGTGCATGGTGTATTTTAGGGATTATGAGCTTCTTTCAAGG ACCAAGAAATTTCCATTTGTGCTTCATGAAAAAAACTTCTGGTTTTTTTCAT

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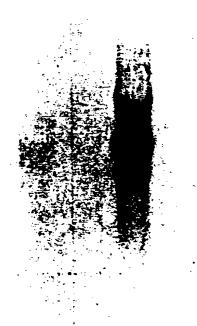
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FIG. 6

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FIG. 6

HL-60	Normal Spleen	ML Spleen	Liver	Placen'	Cerebellum
H.	Nor	CML	Li.	Pla	Cer



28S rRNA

18S rRNA

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FIG. 7

Eco RI Bam HI Hind III

